
Fiery-necked Nightjar *Caprimulgus pectoralis* and Black-shouldered Nightjar *C. nigriscapularis* in Rwanda

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Engoulevent musicien *Caprimulgus pectoralis* et Engoulevent à épaulettes noires *C. nigriscapularis* au Rwanda. Le Rwanda se trouve à la limite des aires de distribution de l'Engoulevent musicien *Caprimulgus pectoralis* et de l'Engoulevent à épaulettes noires *C. nigriscapularis*, deux taxons séparés, de façon controversée, par Fry en 1998. La première observation confirmée au Rwanda du premier et une observation probable du second sont présentées, avec des photos. Ces deux observations indiquent également un chevauchement possible des aires de distribution des deux formes. *C. pectoralis* pouvant se disperser pendant la période internuptiale, il reste toutefois à confirmer qu'il est présent au Rwanda pendant la période de reproduction. La reproduction sympatrique sans intergradation, si confirmée, prouverait que *C. pectoralis* et *C. nigriscapularis* sont des espèces distinctes.

Summary. Rwanda lies in the border area between the ranges of Fiery-necked Nightjar *Caprimulgus pectoralis* and Black-shouldered Nightjar *C. nigriscapularis*, split, controversially, by Fry in 1998. I present the first confirmed record for the former and a probable record for the latter, including photographs, from Rwanda. These two records also indicate a possible overlap in the ranges of the two forms. However, because *C. pectoralis* may disperse during the non-breeding period, it remains to be confirmed if it is present in Rwanda during the breeding season. Sympatric breeding without intergradation would, if confirmed, conclusively demonstrate that *C. pectoralis* and *C. nigriscapularis* are separate species.

The split of Fiery-necked Nightjar *Caprimulgus pectoralis* from Black-shouldered Nightjar *C. nigriscapularis* by Fry (1988), while accepted by many, remains controversial. Evidence for the split, including morphology (Fry & Harwin 1988, Cleere 1995) and vocalisations (Fry 1988), is disputed. Louette (1990) argues that colour criteria specified by Fry & Harwin for separating the two taxa does not hold true for specimens from DR Congo, Burundi and Rwanda. Dowsett & Dowsett-Lemaire (1993) contest that 'the voices of *C. pectoralis* and *nigriscapularis* are sufficiently alike to point to them being conspecific'. In agreement with these, Jackson (in prep.) concludes: 'The evidence does not support the elevation of *C. p. nigriscapularis* to species status. The mensural data alone provide sufficient evidence to show that *C. p. nigriscapularis* is no more than the northern subspecies of *C. pectoralis*.' Here, I present two separate observations of *C. pectoralis* and *C. nigriscapularis* from eastern Rwanda and include photographs that show no evidence of intergradation between them. Given that none of the previous records of the *C. pectoralis* superspecies from Rwanda were conclusively identified as either *pectoralis* or *nigriscapularis* (see below), my

record of *C. pectoralis* is the first confirmation of this species from Rwanda.

Black-shouldered Nightjar *Caprimulgus nigriscapularis*

On 13 December 2009, at c.12.10 hrs, c.1.5 km west of Rusumo (02°22'58.41"S 30°46'7.05"E) at 1,365 m, I flushed a nightjar from a thicket on a grassy hillside with overgrown vegetation dominated by *Lantana*. The bird was very pale rufous—almost sandy—overall, with white patches in the outer primaries and white in the outer tail. It landed on the ground, where I was able to observe it closely and take photographs (Fig. 1). It had narrow white submoustachial stripes and two white marks on the throat. The central crown exhibited no strong streaking or contrast with its sides. What was visible of the belly appeared very rufous. The white in the outer tail extended only partially along the outermost feather, while the closed wing was the darkest part of the bird, being generally mid rufous with scattered darker marks and three bands of pale markings on the coverts. The leading edge of the wing had many dark marks and lacked any pale markings, although the 'shoulder' was obscured by the neck feathers. As I attempted to change my

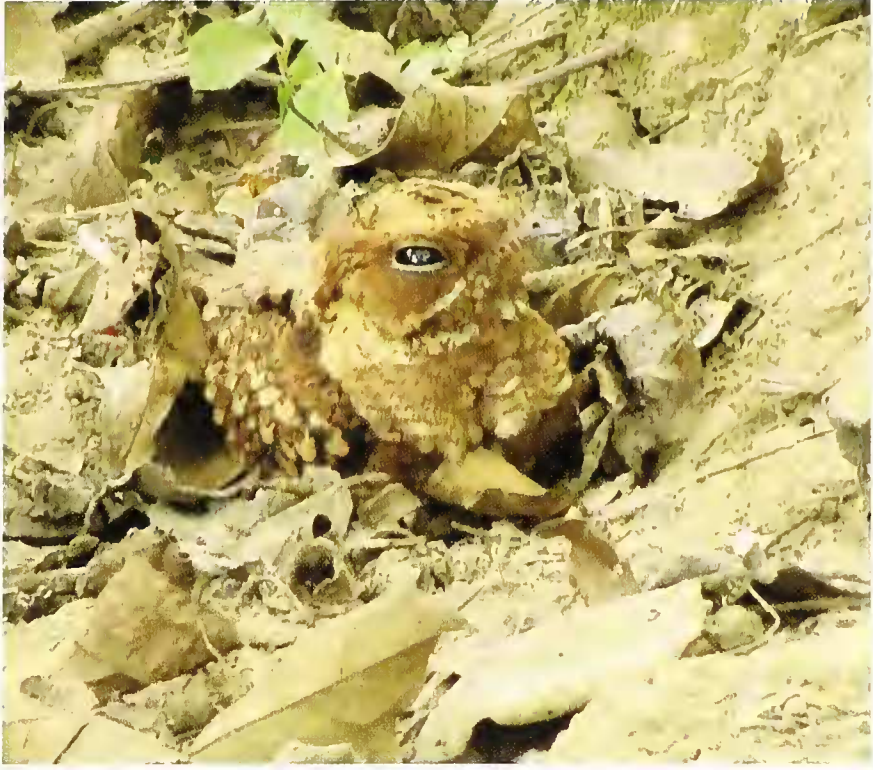


Figure 1. Probable rufous-morph Black-shouldered Nightjar *Caprimulgus nigriscapularis*, Rusumo, Rwanda, 13 December 2009 (Jason Anderson)

Probablement un Engoulevent à épauettes noires *Caprimulgus nigriscapularis* de la forme rousse, Rusumo, Rwanda, 13 décembre 2009 (Jason Anderson)

viewing angle, the bird flushed again and I could not relocate it. Unable to identify the bird, I sent my photographs to Nigel Cleere, who identified it as a rufous-morph Black-shouldered Nightjar *C. nigriscapularis*, mentioning ‘This species is prone to throwing up the odd rufous individual’ (N. Cleere *in litt.* 2011). Upon examining the same images, H. D. Jackson (*in litt.* 2012) concluded that ‘it is probably *nigriscapularis*.’ However, R. J. Dowsett & F. Dowsett-Lemaire (*in litt.* 2012) consider that, based on the images alone, the identity of the bird cannot be confirmed. When compared with the images of the Fiery-necked Nightjar (Figs. 2–3), despite being much paler in overall tone, the photograph shows the distinctive dark lesser coverts (‘shoulder’ patch) from which the species acquires its English name. The photograph also shows only a few dark streaks on the crown. Holyoak (2001) states: ‘most *nigriscapularis* are distinct in having [...] crown with fewer dark streaks’ and Cleere (1995) also mentions ‘Tends to have less streaking on the crown than the four races of *C. pectoralis*’. I examined nine specimens of both *nigriscapularis* (two males and two females) and *pectoralis* (one male, two females, and one unsexed) at the Natural History Museum (BMNH), Tring, and found that there were no *pectoralis* skins with as few streaks as the bird I had photographed. These included a rufous-morph *C.*

p. fervidus from modern-day Zimbabwe (BMNH 1953.54.161), which was compared directly with a rufous-morph *nigriscapularis* from Sierra Leone (BMNH 1926.5.3.305) (see Fig. 4) and showed significantly more dark streaking on the crown, almost forming a single stripe. R. J. Dowsett & F. Dowsett-Lemaire (*in litt.* 2012) consider uppertail colour to be a reliable feature in separating the two forms (grey for *C. pectoralis* and brown for *C. nigriscapularis*), a feature not mentioned by either Cleere (1995, 1998) or Holyoak (2001). However, this did not hold true for rufous-morph specimens I examined at BMNH, which had brown uppertail feathers in both forms.

Fiery-necked Nightjar *Caprimulgus pectoralis*

On 21 August 2010, at *c.*14.20 hrs, *c.*4 km east of Kibungo town (02°09’15.50”S 30°34’47.30”E) at 1,530 m, I flushed a nightjar from leaf litter within an open mixed eucalyptus and pine plantation with native bushes and grass in the understorey. The bird took off silently, alighting *c.*10 m away. I observed it for five minutes and took photographs (Figs. 2–3). In flight the bird displayed clear white tail corners and obvious white wing patches covering *c.*3–4 primaries. On the ground it showed a fairly square tail, a buffy moustachial stripe, a buff crown with a darker central stripe, clearly visible chestnut ‘shoulders’ on the folded wing, buffy ‘stripes’ over the scapulars with black spots running parallel along both sides, chestnut on the nape and neck-sides as well as on the face,



Figure 2. Fiery-necked Nightjar / Engoulevent musicien *Caprimulgus pectoralis*, Kibungo, Rwanda, 21 August 2010 (Jason Anderson)



Figure 3. Fiery-necked Nightjar / Engoulevent musicien *Caprimulgus pectoralis*, Kibungo, Rwanda, 21 August 2010 (Jason Anderson)



Figure 4. Comparative photo showing extent of streaking in rufous-morph Fiery-necked Nightjar *Caprimulgus pectoralis* (upper) and rufous-morph Black-shouldered Nightjar *C. nigriscapularis* (lower). Upper specimen no. 1953.54.161, male, Rhodesia; lower specimen no. 1926.5.3.305, male, Sierra Leone (Guy M. Kirwan, © Natural History Museum, Tring)

Photo montrant l'étendu des stries dans la forme rousse de l'Engoulevent musicien *Caprimulgus pectoralis* (en haut) et la forme rousse de l'Engoulevent à épaulettes noires *C. nigriscapularis* (en bas). Spécimen du haut no. 1953.54.161, mâle, Rhodésie; Spécimen du bas no. 1926.5.3.305, mâle, Sierra Leone (Guy M. Kirwan, © Natural History Museum, Tring)

and a dark bill and eye. Although I suspected that this was a male Fiery-necked Nightjar, Nigel Cleere again confirmed the identification: 'The bird in the photos, especially on the lesser coverts (the shoulders) is much too pale to be Black-shouldered Nightjar. Despite the altitude, I would have no hesitation in saying that your bird is a Fiery-necked' (N. Cleere *in litt.* 2011). Cleere was unable to confirm the subspecies from the photographs, although it is almost certain to be either *fervidus* or *shelleyi* (see below). I did not record the species again on two subsequent visits to the same woodland.

Discussion

The status of *C. pectoralis* / *nigriscapularis* in Rwanda is unclear. During the 1970s and 1980s, Jean Pierre Vande weghe made numerous observations (based mainly on vocalisations) of nightjars of the *pectoralis* / *nigriscapularis* complex in north-east and south-east Rwanda (see Fig. 5). As these records were made prior to Fry's (1988) separation of the two taxa, no attempt was made to identify records to taxon (Vande weghe &

Vande weghe 2011; J. P. Vande weghe pers. comm.).

The only documented record from Rwanda is a specimen in the Royal Museum for Central Africa (RMCA), Tervuren, Belgium (RMCA 47894, collected at Kamobuga, Rugege Forest, on 2 April 1949 by A. Fain). Although it was labelled *C. nigriscapularis*, M. Louette (1990; *in litt.* 2011) believes this specimen, along with another collected in Burundi and two collected c.110 km further north in present-day DR Congo, to be intermediate between *pectoralis* and *nigriscapularis*. Cleere & Nurney (1998) consider the Rwandan and Burundian specimens from Tervuren to be closer to *C. p. fervidus*.

In short, the identity of RMCA 47894 requires confirmation, either *C. p. fervidus* or an intermediate between *C. pectoralis* and *C. nigriscapularis*. However, Schouteden (1966) lists this specimen as *nigriscapularis* and gives a second bracketed (= not in the RMCA) record for *nigriscapularis* from Mimuli (in north-east Rwanda) by K. Curry-Lindahl, the validity of which I have been unable to confirm and is doubted by F. Dowsett-Lemaire (*in litt.* 2012), although it falls well within the distribution of the north-east Rwandan population that Vande weghe suspects is *nigriscapularis* (see below).

Subsequent authors have followed Schouteden, including Fry & Harwin (*in Fry et al.* 1988), Holyoak (2001), Cleere & Nurney (1998), and all current field guides (e.g. Stevenson & Fanshawe 2002, Sinclair & Ryan 2003), which show the range of *nigriscapularis* to include Rwanda despite the hitherto apparent lack of conclusive evidence. Thus my sighting of *C. pectoralis* documented here confirms this species for the first time from Rwanda, although its presence as a resident or breeding species remains to be elucidated.

My observations are of further interest, as they point to the possibility of overlap in the ranges of *C. pectoralis* and *C. nigriscapularis* (Fig. 5), without any apparent signs of intergradation evident in the images. Previous reports of overlap in the ranges of Fiery-necked (generally to the south) and Black-shouldered Nightjars (to the north) have never been confirmed, and include Cleere's comment that they 'may well overlap in parts of central and southern Zaire [now DRC]' (Cleere 1995), a hypothesis doubted by F. Dowsett-Lemaire (*in litt.* 2012). Cleere's comment may refer to a specimen

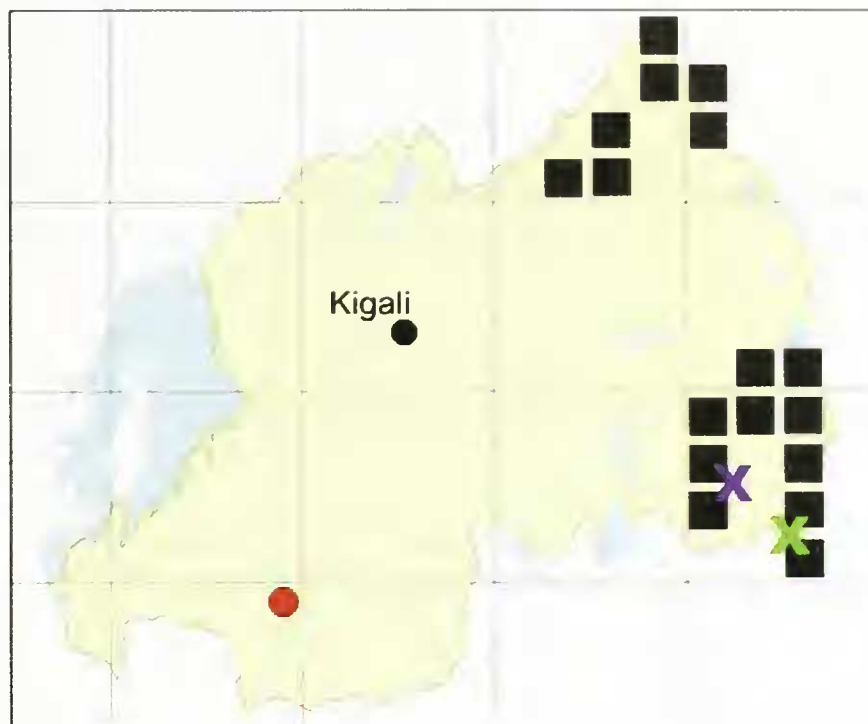


Figure 5. Map showing records of the *Caprimulgus pectoralis* superspecies in Rwanda. Black squares refer to records (mainly audio) by J. P. Vande weghe from the 1970s and 1980s not confirmed as either *pectoralis* or *nigriscapularis*. The red circle refers to RMCA 47894 specimen discussed in the text. The crosses refer to my records, green for probable *nigriscapularis*, purple for *pectoralis*. Adapted with permission from Vande weghe & Vande weghe (2011).

Carte montrant les observations de la superespèce *Caprimulgus pectoralis* au Rwanda. Les carrés noirs indiquent des observations (principalement auditives) de J. P. Vande weghe des années 1970s et 1980s qui ne font pas la distinction entre *pectoralis* et *nigriscapularis*. Le cercle rouge indique le spécimen RMCA 47894 mentionné dans le texte. Les croix indiquent mes observations, vert pour le *nigriscapularis* probable, pourpre pour *pectoralis*. Adapté avec la permission de Vande weghe & Vande weghe (2011).

collected in Matadi (in south-east DRC, on the border with Angola) and initially identified as *C. nigriscapularis* (Chapin 1939) which has since been re-identified as *C. pectoralis* by F. Dowsett-Lemaire (*in litt.* 2012). Vande weghe & Vande weghe (2011) state: 'since most distribution data are based on vocal records, the exact status and distribution of both species in Rwanda remain unclear. In the area of Rwanda and Burundi the two species clearly come together, and we suspect that besides the local breeding population, the country is visited seasonally by wandering individuals.'

Confirmation of sympatry without intergradation in their breeding ranges would conclusively demonstrate that *pectoralis* and *nigriscapularis* are separate species. At least one of the four races of *C. pectoralis* (*fervidus*) has

been speculated to be a partial migrant (Cleere & Nurney 1998, Holyoak 2001), dispersing widely from its southern African breeding grounds during the non-breeding season, although more recent evidence from Dowsett-Lemaire & Dowsett (2006) and Dowsett *et al.* (2008) indicates that populations of *fervidus* in Malaŵi and Zambia are essentially sedentary. *C. p. fervidus* has been confirmed from southern Tanzania (Cleere & Nurney 1998). Cleere (1995), Cleere & Nurney (1998) and Holyoak (2001) consider birds from southern DR Congo (and possibly from central Tanzania and the Kenyan coastal population) to belong to the race *shellei* which 'may be partially migratory, possibly moving south after breeding' (Cleere 1995). However, this race is not admitted by Fry & Harwin (1988), who described birds from these areas as *fervidus*. Although the movements of Black-shouldered Nightjar are poorly known, both Cleere & Nurney (1998) and Holyoak (2001) observe that it is 'apparently sedentary throughout its range'.

The distribution map in Vande weghe & Vande weghe (2011) for their observations of *C. pectoralis* / *nigriscapularis* in Rwanda (see Fig. 5) indicate two apparently separate populations (separated by c.60 km), one in the north-east, the other in the south-east. They suspect that the two populations may correspond to the two taxa under discussion, with *C. nigriscapularis* present in the north-east and *C. pectoralis* in the south-east (Vande weghe & Vande weghe 2011). While my record of *C. pectoralis* confirms their suspicions regarding this form (which may be either resident in, or a regular migrant to, south-east Rwanda), my probable record of *C. nigriscapularis* indicates it may be present further south than Vande weghe & Vande weghe (2011) had suspected (>1 km from the Tanzanian border), and 30 km south of my *C. pectoralis* record.

Conclusions

The question as to whether *C. nigriscapularis* and *C. pectoralis* are species may only be conclusively resolved through phylogenetic analysis across the range of these taxa and / or application of objective criteria for species delimitation (e.g. as proposed by Tobias *et al.* 2010). Louette's (1990) contended intermediate specimens indicate the possibility of intergradation between the two forms in western Rwanda and eastern

DR Congo; any attempt to resolve this question should include thorough re-examination of these specimens. A larger number of recordings of vocalisations from the area of geographical overlap / approach would also be useful to determine the extent to which the differences that Fry (1988) describes really are both consistent in these areas and sufficiently significant to serve as a species-isolating mechanism.

Not enough is currently known of the precise breeding seasons or movements of *C. nigriscapularis* and *C. pectoralis* to be certain whether they are sympatric when breeding. The majority of Vande weghe's observations were vocal records made between June and early September, during the dry season and up to the initial September rains (pers. comm.). These probably involved territorial males, possibly in anticipation of breeding. Both Holyoak (2001) and Cleere & Nurney (1998) indicate that most subspecies of *pectoralis* favour the August–December period for breeding across the species' range. Cleere & Nurney (1998) offer the additional observation that (for *C. pectoralis*) the 'breeding season in all countries [...] tends to commence towards the end of the dry season, at the beginning of the rains'. F. Dowsett-Lemaire (*in litt.* 2012) notes that both *fervidus* in Zambia and *nigriscapularis* in West Africa sing for nine months of the year, not only during the breeding season. Thus, although no firm conclusions can be made, it is probable that one of the two forms does indeed breed in Rwanda. However, given the possibility of *nigriscapularis* occurring in the south-east, it could be that all calling males belong to this taxon, with *C. pectoralis* present only as a non-breeding migrant (*fervidus* or *shellei*). Thus, it is impossible to draw firm conclusions as to whether the *C. pectoralis* I observed on 21 August would have been present in the likely breeding season that was due to begin soon after. Given that my observations involve just two records, only one of which is confirmed, the question of whether *C. pectoralis* and *C. nigriscapularis* are indeed sympatric during the breeding season remains to be confirmed. However, my two records do at least suggest occasional overlap in the ranges of the two taxa.

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References

- Baker, N. E. & Baker, E. M. (in prep) *Birds of Tanzania: An Atlas of Distribution and Seasonality*. <http://www.tanzaniabirdatlas.com> (accessed September 2011).
- Chapin, J. P. 1939. The birds of the Belgian Congo. Part 2. *Bull. Amer. Mus. Nat. Hist.* 75: 418–420.
- Cleere, N. 1995. The identification, taxonomy and distribution of the Mountain Nightjar *Caprimulgus poliocephalus* / Fiery-necked Nightjar *C. pectoralis* complex. *Bull. ABC* 2: 86–97.
- Cleere, N. & Nurney, D. 1998. *Nightjars: A Guide to Nightjars and Related Nightbirds*. Robertsbridge: Pica Press.
- Dowsett, R. J. 1993. Afrotropical avifaunas: annotated country checklists. Rwanda. *Tauraco Res. Rep.* 5: 205–211. Liège: Tauraco Press.
- Dowsett, R. J. & Dowsett-Lemaire, F. (eds.) 1993. *A Contribution to the Distribution and Taxonomy of Afrotropical and Malagasy Birds*. *Tauraco Res. Rep.* 5. Liège: Tauraco Press.
- Dowsett, R. J. & Dowsett-Lemaire, F. 2006. *The Birds of Malawi*. Liège: Tauraco Press.
- Dowsett, R. J., Aspinwall, D. R. & Dowsett-Lemaire, F. 2008. *The Birds of Zambia*. Liège: Tauraco Press.
- Fry, C. H. 1988. Skulls, songs and systematics of African nightjars. *Proc. VI Pan-Afr. Ornithol. Congr.*: 105–131.
- Fry, C. H. & Harwin, R. M. 1988. Caprimulgiformes. In Fry, C. H., Keith, S. & Urban, E. K. (eds.) *The Birds of Africa*. Vol. 3. London, UK: Academic Press.
- Holyoak, D. T. 2001. *Nightjars and their Allies*. Oxford: Oxford University Press.
- Jackson, H. D. in prep. The taxonomic status of the Black-shouldered Nightjar *Caprimulgus nigriscapularis*, Reichenow, 1893.
- Louette, M. 1990. The nightjars of Zaire. *Bull. Br. Ornithol. Cl.* 110: 71–77.
- Schouteden, H. 1966. *La Faune Ornithologique du Rwanda*. Tervuren: Musée Royal de l'Afrique Centrale.
- Sinclair, I. & Ryan, P. 2003. *Birds of Africa South of the Sahara*. Cape Town: Struik.
- Stevenson, T. & Fanshawe, J. 2004. *Birds of East Africa*. London, UK: Christopher Helm.
- Tobias, J. A., Seddon, N., Spottiswoode, C. N., Pilgrim, J. D., Fishpool, L. D. C. & Collar, N. J. 2001. Quantitative criteria for species delimitation. *Ibis* 152: 724–746.
- Vande weghe, J. P. & Vande weghe, G. R. 2011. *Birds in Rwanda*. Kigali: Rwanda Development Board.

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